

Supporting Programme

Monday, 17 August 1987

- 14:00 - 17:00** **Big City Sightseeing Tour of Berlin (West)**
In a deluxe motor coach, you will see many of the highlights of Berlin as we drive through the city: Kurfürstendamm, Gedächtniskirche (Memorial Church), Schöneberg City Hall... We will visit the district of Kreuzberg and see the beautifully restored housing projects "Riehmers Hofgarten" and "Chamissoplatz" which have unique historical and architectural features. We will go on to see the Brandenburg Gate, the Reichstag, the Wall, Bellevue Palace, the Hansa Quarter, Charlottenburg Palace and the Olympic Stadium. Tour begins and ends at ICC. Price per person: DM 28.

Tuesday, 18 August 1987

- 9:30 - 16:00** **Berlin historic**
Our excursion begins with a visit to the Martin-Gropius-Building. Its 40 rooms currently house an exhibition of the history of Berlin, from its beginnings in the early 13th century up to the present day. This is the main historical exhibit of the "750-year Celebration", which offers a comprehensive picture of the varied political and cultural development of what was once Germany's capital. After a guided tour of the exhibition, we will enjoy a light lunch in the museum restaurant. To round-out and complement our museum visit, we will take a city sightseeing tour in the afternoon through Berlin (West), which will highlight the cultural and historical sights of the city. This tour will be led by specially trained and knowledgeable guides, one whose special area is the history of Berlin, the other is an expert who will inform you about the Martin-Gropius-Building and its current exhibition. Tour begins at ICC and ends at ICC or hotels in the city centre. Price per person: DM 98.



Monday, 17 August 1987

- Yilmaz Z.
Design Principles for Thermally Comfortable Indoor Spaces
- Yoshino H., Matsumoto H., Makita K., Hasegawa F., Utsami Y., Akabayashi S.-I.
Investigation of Indoor Thermal Environment, Air Quality and Energy Consumption in Highly Insulated Detached Houses in Japan

15:30 **Break**

16:00 **Discussion at Poster Walls (Area F1)**

14:00 **Poster Session, Saal 8 (Room 8)**

Volatile Organic Compounds

Co-Chairpersons:

- L. Mølhave, Dr., Århus (DK)
- J. Lewtas, Dr., Research Triangle Park (USA)

Presentations (5 min. each):

- Brugnone F., Perbellini L., Faccini G.B., Pasini F.
Benzene in the Breath and Blood of General Public
- De Bortoli M., Knöppel H., Pecchio E., Vissers H.
Performance of a Thermally Desorbable Diffusion Sampler for Personal and Indoor Air Monitoring
- Jungers R.H., Sheldon L.S.
Characterization of Volatile Organic Chemicals in Public Access Buildings
- Mailahn W., Seifert B., Ullrich D.
The Use of a Passive Sampler for the Simultaneous Determination of Long-Term Ventilation Rates and VOC Concentrations
- Matthews T.G., Thompson C.V., Wilson D.L., Hawthorne A.R., Mage D.T.
Air Velocities Inside Domestic Environments: An Important Parameter for Passive Sampling
- Mierzwinski S., Breum N.O., Madsen Th.L.
Personal Exposure due to Solvent Spillage on Clothing
- Pleil J.D., Oliver K.D., McClenny W.A.
Time-Resolved Measurement of Indoor Exposure to Volatile Organic Compounds

Monday, 17 August 1987

- Ullrich D., Liu Z.-F., Seifert B.
Assessment of the Indoor Air Concentration of an Organic Substance Emitted from a Continuous Source using Methyl Benzoate as an Example
- Verhoeff A., Suk H., van Wijnen J.
Organic Solvents in the Indoor Air of Ten Small Screen Printing Plants and Surrounding Houses
- Wallace L., Clayton C.A.
Volatile Organic Compounds in 600 US Homes: Major Sources of Personal Exposure
- Wallace L., Jungers R., Sheldon L., Pellizzari E.
Volatile Organic Chemicals in 10 Public-Access Buildings

15:15 Break

15:45 Discussion at the Poster Walls (Area A1)

14:00 Poster Session, Saal 9 (Room 9)

Particulate Matter and Fibres

Co-Chairpersons:

- H. Bossenmayer, Dr., Stuttgart (D)
- J.J. Quackenboss, Dr., Tucson (USA)

Presentations (5 min. each):

- Aalykke C., Kahr O., Lundqvist G.R.
Type of Floor Airborne and Settling Particulates in a Day-Care Institution
- Al-Mutaz I.S.
CO, Particulates, Lead Levels in the Indoor Environment in Riyadh, Saudi Arabia
- Bluysen P., van de Loo H., Leaderer B.P.
Chamber and Field Studies of Respirable Suspended Particulate Deposition Rates Indoors
- DiNardi S.R., Ludwig J., Neumann R.
Monitoring Respirable Suspended Particles in the Indoor Environment
- Fujii S., Tarumi H., Kim K.Y., Hayakawa I.
Measurements of Submicron Particles by CNC and Diffusion Battery



Supporting Programme

In 1987, Berlin is commemorating its 750-year history as a city. A large number of special events (art and scientific exhibitions, music and city festivals) take place. Those who wish to participate at these events during the Conference or while staying a few days longer in Berlin, may obtain information about the programme of the "750-year Celebration" at the Registration Counter.

To book one of the following tours, please contact also the Registration Counter.

Sunday, 16 August 1987

16:30 -
18:00

City Sightseeing Tour of Berlin (West)

Early Birds can get an initial whiff of the famous "Berliner Luft", the Berlin atmosphere. During a short sightseeing tour through the centre of Berlin, you will get an introduction to the city, and a first impression of what you can expect in the coming days. You will return to the ICC in time for the Get-together Party.

Tour begins and ends at ICC.

Price per person: DM 22.

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Social Programme

19:30

Arrival at the Spandau Citadel.

We spend the evening together at the Spandau Citadel, a 16th century fortress. Hot and cold food specialties, wine and beer await you in a rustic setting. You will experience a taste of the city as it was centuries ago.

From
22:00

Return by coach to ICC and hotels in the city center.

Informal dress is suggested. As old fortresses tend to have been built without considering modern rules of air-conditioning, and no kerosene heaters will be provided for obvious reasons, bringing a warm sweater is highly recommended.

Contribution for Conference participants per person: DM 50.
For registered accompanying persons the evening is free.
Fee for non-registered guests per person: DM 90.



Monday, 17 August 1987

- Kulmala M., Saari H., Raunemaa T., Olin M.
Indoor Air Aerosols: Outdoor Air Influence on Indoor Air
- Lebret E., McCarthy J., Spengler J., Chang B.-H.
Elemental Composition of Indoor Fine Particles
- McCarthy S.M.
Multivariate Analyses of Indoor and Outdoor Aerosols: A Comparison of Cluster and Factor Analytic Results
- Nielsen O.
Man-Made Mineral Fibres in the Indoor Climate Caused by Ceilings of Man-Made Mineral Wool
- Ozao S., Nirei T., Yamagishi N., Yoshizawa S., Irie T., Sugawara F.
Study on Pollution by Airborne Particulate Matter in Subway Stations
- Rindel A., Hugod C., Bach E., Breum N.
MMMF-Ceilings in Kindergartens - Health Effect
- Schneider T., Eriksen P., Vinzents P., Peterson O.H., Kofoed Hansen B.
Easy Method for Measuring the Quality of Cleaning
- Schultz E.
Quantitative Microscopic Analysis of Indoor Particle Deposition Samples
- Šega K., Kalinić N., Šišović A.
Indoor Concentrations of Total Suspended Particulate Matter, Respirable Particles and Smoke in Kindergartens and Primary Schools
- Turk B.H., Grimsrud D.T., Brown J.T., Geisling-Sobotka K.L., Harrison J., Prill R.J.
Commercial Building Ventilation Rates and Particle Concentrations

15:30

Break

16:00

Discussion at the Poster Walls (Area H 1)

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Monday, 17 August 1987

14:00 Poster Session, Saal 10 (Room 10)

Combustion Gases: Sources and Sinks

Co-Chairpersons:

B. Brunekreef, Dr., Wageningen (NL)
B.P. Leaderer, Professor, New Haven (USA)

Presentations (5 min. each):

- Billick I.H., Nagda N.L.
Reaction Decay of Nitrogen Dioxide
- Borrazzo J.E., Davidson C.I., Hendrickson C.T.
A Statistical Analysis of Published Gas Stove
Emission Factors for CO, NO, NO₂
- Borrazzo J.E., Peters C., Peck S., Davidson C.I.
Determination of NO₂ Loss Rates from
Concentration Measurements in an Occupied
Urban Residence
- Dave J.M.
Emissions from Conventional Kerosene Stove
Used in Indian Kitchen
- Gundel L.A., Somorjai N., Novakov T.
The Interaction of Nitrogen Oxides with
Particles: Chemical Transformation on Activated
Carbon and Alumina Surfaces
- Hoogenboezem C.G., Dietz R.N., D'Ottavio T.W.,
Goodrich R.W.
Two-Zone Modelling for Air Exchange Rates
and NO₂ Source and Decay Rates in a Southern
California Residential Indoor Air Quality Study
- Macnair R.A., Elkins R.H., Billick I.H.
Effect of Level of Air Infiltration on CO and NO
Emissions from Unvented Gas Space Heaters in
Mass-Balance (Chamber) Measurements
- Moschandreas D.J., Relwani S.M.
Field Measurements of NO₂ Gas Range Top
Burners Emission Rates
- Naudeix D.
Limits of Carbon Monoxide and Dioxide from
Unvented Instantaneous Water Heaters
- Rau J.A., Huntzicker J.J.
Composition and Size Distribution of Residential
Wood Smoke Particles
- Rowe R.
Solid and Gaseous Emissions from Wood Fired
Boilers



Social Programme

Sunday, 16 August 1987

18:00 -
20:00

Get-together Party
International Congress Centre ICC Berlin
Dachgarten (Roof Garden)

Monday, 17 August 1987

18:00

Departure by coach from the ICC Berlin

19:00

Reception given by the Senate of Berlin
in the "Reichstag" Building
(former House of Parliament)

Return by coach to hotels in the city center
and ICC.

Wednesday, 19 August 1987

Social: Indoorers go out

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Departure by coach from ICC and hotels Bristol
Kempinski, Econtel, Excelsior, Novotel Airport.

We start by driving through part of "green" Berlin,
Grünwald Forest, to Berlin's famous recreational
lake, the Wannsee.

17:00

Departure by boat from the landing stages at
Wannsee Station (suburban trains S1 and S3).

We travel by ship on the River Havel to the old
quarter of the Spandau district. A short walk
brings us to the Spandau Citadel.

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Friday, 21 August 1987

- McCarthy J., Spengler J., Chang B.-H., Coultas D., Samet J.
A Personal Monitoring Study to Assess Exposure to Environmental Tobacco Smoke
- Moschandreas D.J., Sterling D.A., Gibbons R.D.
Perception of Daily Cigarette Consumption
- Reckendorf H.
Indoor Air Pollution through Smoking: A Challenge to Industrial Medicine
- Revsbech P., Korsgaard J., Lundqvist G.R.
Tobacco Smoking and the Indoor Suspended Particulate Matter
- Schlatter J., Wanner H.-U.
Strategies to Avoid Negative Health Effects of Passive Smoking
- Schmidt F.
Passive Smoking as a Scientific, Political, Juridical and Economic Problem
- Vu Duc T., Huynh C.K.
Sidestream Tobacco Smoke Constituents in Indoor Air Modelled in an Experimental Chamber
- Witorsch R., Witorsch P.
Maternal Smoking and Pulmonary Performance in Children: A Critical Analysis

11:00 Break

11:30 Discussion at Poster Walls (Area D 5)

12:30 **Symposia Summaries, Saal 3 (Hall 3)**
(Symposia of Thursday Afternoon)
Chair: B. Berglund, Dr., Stockholm (S)

13:00 End of Conference



Monday, 17 August 1987

- Sharma S.P., Parikh P.P., Baruah P.C.
Vitiating of Combustion Air and Its Effect on the Performance of a Gas Stove
- Spicer C.W., Coutant R.W., Ward G.F., Joseph D.W., Gaynor A.J., Billick I.H.
Rates and Mechanisms of NO_x Removal From Indoor Air by Residential Materials
- Yanagisawa Y., Fasano A.M., Spengler J.D., Ryan P.B., Billick I.H.
Removal of Nitrogen Dioxide by Interior Materials

15:30 Break

16:00 Discussion at Poster Walls (Area C 1)

18:00 Departure by coach from ICC Berlin

19:00 **Reception given by the Senate of Berlin at "Reichstag" building**
Return by coach to "Bahnhof Zoo", some hotels in the city centre and ICC.

Tuesday, 18 August 1987

8:30 **Symposia Summaries, Saal 3 (Hall 3)**
(Symposia of Monday Afternoon)
Chair: B. Berglund, Dr., Stockholm (S)

Plenary Lecture, Saal 3 (Hall 3)

9:00 **What Architects Can do to Improve Indoor Air Quality**
H. Levin, Dr., Berkeley (USA)

9:45 **Symposium, Saal 3 (Hall 3)**

Thermal Climate and Comfort

Organizer: D. Wyon, Dr., Gävle (S)

Chair: P.O. Fanger, Professor, Lyngby (DK)

Presentations (15 min. each):

- Ohgke H., Trommler T., Beckert J.
An Attempt to Define Thermal Comfort for Severely Compromised Patients on Artificial Respiration
- de Dear R.J., Tanabe S., Knudsen H.N., Pejtersen J.H., Mackeprang J., Fanger P.O.
Thermal Response of Wool Clothing During Humidity Transients
- Fanger P.O., Melikow A.K., Hanzawa H.
Draught and Turbulence
- Ishii A., Katayama T., Tsutsumi J.-I., Nishida M., Sakakibara N.
Estimation of Thermal Environment in a Naturally Ventilated Room with Windows Opened by Using Data from Full-Scale Measurements
- Sakakibara N., Ishii A., Katayama T., Tsutsumi J.-I., Nishida M.
Experimental Study on Thermal Sensation of Human Body in Naturally Ventilated Rooms
- Berglund L.G., Fobelets A.P.
Occupant Acceptance of Air Motion and Asymmetric Radiation in Neutral and Cool Environments
- Kähkönen E., Ilmarinen R.
Indoor Thermal Climate in Shops and Stores



Friday, 21 August 1987

- Kunz C.
Indoor Radon: The Diurnal Cycle
- Mocsy L., Fulea C., Simon K.
The Influence of Ventilation in Rooms upon the Effective Dose Equivalent from Inhalation of 222-Rn and their Short Lived Daughters
- Swedjemark G.A., Wahren H., Mäkitalo A., Tell W., Melander E.
Experiences from Indoor Radon-Daughter Limitation Schemes in Sweden
- Yokoyama S., Ochifuji K.
A Study of Indoor Radon and Radon Daughter Concentrations in Hokkaido, Japan

11:00 **Break**

11:30 **Discussion at Poster Walls (Area E 2)**

10:00 **Poster Session, Saal 7 (Room 7)**

Environmental Tobacco Smoke: Characterization and Field Studies

Co-Chairpersons:

- J.L. Repace, Dr., Washington (USA)
- M.J. Suess, Dr., Copenhagen (DK)

Presentations (5 min. each):

- Coultas D.B., Samet J.M., Peake G.T., McCarthy J., Spengler J.
Reliability and Validity of Questionnaire Assessment of Involuntary Tobacco Smoke Exposure
- Eudy L., Heavner D., Stancill M., Simmons J.S., McConnell B.
Measurement of Selected Constituents of Environmental Tobacco Smoke in a Winston-Salem, North Carolina Restaurant
- Hammond S.K., Coghlin J., Leaderer B.P.
Field Study of Passive Smoking Exposure with Passive Sampler
- Klus F., Begutter H., Ball M., Intorp M.
Environmental Tobacco Smoke in Real Life Situations